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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,212	10/08/2003	Hirofumi Nakata	925-267	7455

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EXAMINER	
RUTLAND WALLIS, MICHAEL	

ART UNIT	PAPER NUMBER
2835	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/680,212	Applicant(s) NAKATA ET AL.	
	Examiner Michael Rutland-Wallis	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2006*.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-4,8 and 9* is/are rejected.
7)☐ Claim(s) *5-7 and 10* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *08 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☒ All b)☐ Some * c)☐ None of:
    1.☒ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

Applicant's amendments to the specifications have been entered.

Response to Arguments

Applicant's arguments filed 06/20/2006 have been fully considered but they are not persuasive.

Applicant first alleges two deficiencies in the Myer reference. First that Myer lacks a teaching or suggestion of a detection peculiarly relating to one battery module and Second the voltage sensed by Myer is not based on a power receiving point of one dispersed power among the plurality of dispersed sources.

It remains the position of the office Myer teaches all of applicant's limitations with respect to claim 1. Myer teaches the line voltage sensor is located between the controlling unit and the utility supply line and is used to monitor undesirable characteristics. Myer further teaches the battery modules are charged by the AC power at the utility line i.e. a power receiving point of a battery module to be charged. Therefore during the charging period or off peak time the battery modules of Myer would be similarly suppressed when the line voltage sensor detects an incoming upper limit. Therefore the Myer rejection is maintained

Secondly Applicant alleges the Schermann reference also lacks the monitoring of a single unit at a particular point associated with that unit. Each and every unit in

Schermann is monitored in part by a controller module item 18 located within each consumer unit items 11 and 12, which supply power via a network center to distribution lines. Each control unit associated with the consumer has a sensor line seen in figure 1 feeding the control unit which may be used to monitor multiple electrical characteristics detailed in column 6 lines 49-54 for example. Schermann teaches the monitoring of each unit at a power receiving point associated with that unit and by way of switching and control devices 17 and 18 suppress or enable output power to the distribution lines. Therefore the Schermann rejection is maintained.

The indicated allowability of claim 2 is withdrawn in view of applicant's amendment. The allowability of claim 2 was indicated based the inclusion of **all** of the limitation contained within claim 1. As applicant has broadened the scope and limitations (by removing its dependency from claim 1) of claim 2, a rejection to claim 2 is found below as necessitated by applicant's amendment.

Claim Objections

Claims 5 and 10 are objected to because of the following informalities: applicant refers to "a cancellor" it is believed the proper spelling for said term would be "canceller".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al. (U.S. Pat. No. 4,894,764) Meyer teaches a method of a plurality of dispersed power sources (Fig. 6 items 54A-54I or Fig. 7 item 150 solar array) comprising: a master control unit capable of suppressing the output of the dispersed power sources (column 6 lines 22-41). Meyer further teaches a line voltage sensor (item 113) to monitor a power receiving point to shut down the dispersed supplies when the voltage is out of tolerance (column 6 lines 42-57). Meyer also teaches the high-voltage-to-low-voltage transformers (item 34 Fig. 2) are well known means to link a commercial power source (item 36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schermann et al. (U.S. Pat. No. 5,917,251)

With respect to claim 1 Schermann teaches a method of a plurality of dispersed power sources (item 23) comprising: control unit item 18 to suppress the output of the power source item 23 by using a controllable switch item 17 which is linked to a high-voltage-to-low-voltage transformer (item 22). Schermann teaches item 18 monitors the both the DC battery/accumulator voltage and the network voltage (column 6 lines 50-55) to determine when the accumulator should be charged and when to supply power to consuming loads (column 5 lines 4-21). While Schermann is silent on a specific limit, which is exceeded, Schermann is concerned to suppress the dispersed supplies when demand is low in order to charge the accumulator. It would have been obvious to one of ordinary skill in the art at the time of the invention to program a upper limit value to cause the dispersed supplies to be suppressed in order to assure the supplies are properly charged.

Claims 2, 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schermann et al. (U.S. Pat. No. 5,917,251) in view of Velez (U.S. Pat. No. 5,784,237)

With respect to claims 2 and 8 Schermann teaches an output suppressing method of a plurality of dispersed power sources (item 23) comprising: where Schermann teaches item 18 monitors the both the DC battery/accumulator voltage and the network voltage (column 6 lines 50-55) to determine when the accumulator should be charged and when to supply power to consuming loads (column 5 lines 4-21). While Schermann is silent on a specific limit, which is exceeded, Schermann is concerned to suppress the dispersed supplies when demand is low in order to charge the accumulator. It would have been obvious to one of ordinary skill in the art at the time of the invention to program a upper limit value to cause the dispersed supplies to be suppressed in order to assure the supplies are properly charged. Schermann teaches the use of a management unit (item 19), which is used to transmit and receive data via a control line (item 20) wherein the data may include switching signals to controllable switches (item 17) see column 5 lines 42-51 of the dispersed sources. Schermann does not teach the dispersed source transmitting of a suppression start signal from the dispersed source to the management and then relayed to the remaining sources. Velez teaches a similar system to that disclosed by Schermann where Velez teaches distributed control units (item 10) associated with power distribution lines (i.e. dispersed supplies) in different areas where the control unit are configured to control the suppression of the dispersed sources and a master control unit (item 30) where the control units communicate with other control units or the master control unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Schermann to include the use of transmission of communication signals from the sources to management unit to suppress other dispersed sources in order to maintain the utility gird free of abnormalities.

With respect to claim 4 Schermann teaches the dispersed power sources comprises a storage battery (item 13), stores a suppression power corresponding to the suppressed part into the storage battery inside the dispersed power source and gradually increases the suppression power to be stored.

With respect to claims 9 and 3 Velez teaches the management unit is further configured to receive an output switch signal from other dispersed controllers, which may be to switch the switch controlling units to either an open or closed position similar to the control of Schermann. While the signal transmission to the master unit is not referred to as a suppression cancel signal in either Schermann or Velez it would have been obvious to one of ordinary skill in the art at the time of the invention to program a cancel signal reduce power spikes sent to the loads as the capability to switch or not switch the controlling units to distribute power to the loads in the system is already present the canceling of a suppression signal is therefore similar to retransmitting of the current switch state.

Allowable Subject Matter

Claims 5-7 are allowed. The following is an examiner's statement of reasons for allowance: Schermann teaches A dispersed power source managing system comprising: a plurality of dispersed power sources linked to a high-voltage-to-low-voltage transformer of a commercial power system; and a management unit for managing the plurality of dispersed power sources; wherein the dispersed power sources each comprises: a DC power source; a transformation means for transforming a DC power from the DC power source into an AC power and outputting the AC power; a storage battery; a voltage detection means for detecting a voltage at a power receiving point; an output suppressing means for suppressing the AC power to be supplied to the power receiving point when the voltage at the power receiving point exceeds an upper limit of a proper value and supplying an electric power to the storage battery; an output suppression canceling means for canceling the output suppression by the output suppressing means when the voltage at the power receiving point becomes equal to or lower than the upper limit of the proper value. Schermann does not teach the use of a canceller for canceling under certain conditions and/or transmitting an output suppression start signal and an output suppression cancel signal to the management unit on the basis of outputs of the output suppressing means and the output suppression canceling means nor the further limitations describing the management unit. These further limitations to claim 5 are not taught or rendered obvious by the prior art.

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Schermann teaches A dispersed power source managing system comprising: a plurality of dispersed power sources linked to a high-voltage-to-low-voltage transformer of a commercial power system; and a management unit for managing the plurality of dispersed power sources; wherein the dispersed power sources each comprises: a DC power source; a transformation means for transforming a DC power from the DC power source into an AC power and outputting the AC power; a storage battery; a voltage detection means for detecting a voltage at a power receiving point; an output suppressing means for suppressing the AC power to be supplied to the power receiving point when the voltage at the power receiving point exceeds an upper limit of a proper value and supplying an electric power to the storage battery; an output suppression canceling means for canceling the output suppression by the output suppressing means when the voltage at the power receiving point becomes equal to or lower than the upper limit of the proper value. Schermann does not teach the use of a canceller for canceling under certain conditions and/or transmitting an output suppression start signal and an output suppression cancel signal to the management unit on the basis of outputs of the output suppressing means and the output suppression canceling means nor the further limitations describing the management unit. These further limitations to claim 8 are not taught or rendered obvious by the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. De La Rose et al. (U.S. Pat. No. 6,816,757) teaches a master control unit and data transmission and control means to effect switch control similar to that claimed.

It is also noted this amendments is mistakenly addressed to art unit 2855. This is not correct; please address any future correspondence for this instant application to art unit 2835.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRW

LYNN FEILD
SUPERVISORY PATENT EXAMINER